

AMENDMENTS TO THE CLAIMS:

Please amend Claims 1 and 4 as follows:

1. (Currently Amended) An imaging optical system comprising:
an iris stop;
a layered diffraction optical member laminated with a plurality of diffraction parts, wherein said layered diffraction optical member is provided in front of said iris stop; and
a refraction optical member disposed on a rear side of said iris stop,
wherein said layered diffraction optical member includes a first diffraction part of negative power and a second diffraction part of positive power provided behind said first diffraction part,
wherein said first diffraction part and said second diffraction part each include a diffraction grating, and said diffraction grating of said first diffraction part is made of a material having a dispersion characteristic different from that of a material from which said diffraction grating of said second diffraction part is made,
wherein said layered diffraction optical member is formed to have high diffraction efficiency for diffracted light of a particular order over a visible wavelength range to be used in said imaging optical system,
wherein said imaging optical system forms an image on an image plane with light that has passed through said layered diffraction optical member, said iris stop, and said refraction optical member, and

wherein said layered diffraction optical member further comprises a positive meniscus lens and a positive biconvex lens, with said first diffraction part being disposed on said positive meniscus lens and said second diffraction part being disposed on said positive biconvex lens.

2-3. (Cancelled)

4. (Currently Amended) An optical system according to Claim 1, wherein an air layer is interposed between said first diffraction part and said second diffraction part, and

wherein said imaging optical system further comprises a negative meniscus lens element disposed in front of said iris stop and having a concave surface facing said iris stop, said negative meniscus lens being the lens element closest to said iris stop of any lens element in front of said iris stop.

5-16. (Cancelled)

17. (Previously Presented) An optical system according to Claim 1, wherein each of said first diffraction optical part and said second diffraction optical part comprises a diffraction grating, and wherein the diffraction gratings have blazed shapes oriented in opposing directions.

18. (Cancelled)

19. (Previously Presented) An optical system according to Claim 1, wherein no lens of said optical system is present on a front side of said layered diffraction optical member.

20-21. (Cancelled)

22. (Previously Presented) An optical system according to Claim 1, wherein said refraction optical member is a lens element.